

called, although not the first inhabited, was probably the first civilized part of the globe, and attained extraordinary power and influence. The first king recorded, namely Menes, is supposed to have reigned, at all events, 2,200 years before our era, at which same time, according to some chronologists, Nimrod founded Assyria: Bunsen says 3643 years B.C. All before this is mere fable and perplexing speculation, but from that date we have a more satisfactory knowledge of the progress and condition of Egypt at various periods than might be expected. They wrote their history with an iron pen on granite tablets. "To study it, is to walk among ruins." And what ruins! Stupendous pyramids; temples of gigantic vastness; excavations of the most wonderful nature; colossal statues, sublime although purposely uncouth! An air of mystery is around the whole, and imagination fails in attempting to recall the appearance which must have been presented by these extraordinary monuments when perfect and peopled.

When we contemplate these enormous remains, evidences though they may be of despotism and slavery, it is impossible to avoid a feeling of respect for the minds which conceived such works. Architecture has a noble purpose, that of eternalizing (so to speak) the great efforts of man. How careful should we be in erecting monuments which are to remain long before the world, witnessing either for or against us, and exerting an influence, as they inevitably will, on future works of a like nature!

I am sure you will agree with me that it is scarcely possible to over-estimate the injurious effect produced by one monument of ill taste, or to say how long it may retard the advance of a people towards excellence in this respect. In order to avoid such errors the people themselves must be instructed, and be made judges of what is excellent; and most earnestly would I advocate all measures calculated to advance this object,—universal instruction in drawing, free admission to public monuments and works of genius, encouragement to obvious talent, the erection of fine structures, and the adornment of our buildings with works of art. Too long were such sources of pure pleasure kept closed against the people; and too often have they been reproached for not excelling in a race while the means of progress were actually denied them. Of this, however, another time.

I suggested in my first letter that different modes of living had led to the adoption of different habitations. Those who pastured flocks, and remained but a short time in one spot, adopted the tent; while the cultivators of the land soon found it expedient to construct an edifice of more solid and durable nature of such materials as the country furnished. The early inhabitants of Egypt sought their subsistence at first as hunters or fishermen, and finding along the borders of the Nile natural excavations which offered shelter, were soon led to improve them into dwellings, into temples, into tombs. Or where they did not exist, to excavate and carve the living rocks to their purpose. Countless numbers of these excavations still exist, adorned with columns, sculpture, and paintings. I shall not affront you with a history of Egypt, but I must, nevertheless, remind you of some points necessary for my argument.

Egypt was the scene of stirring events in the early history of the Jews. It was visited by Abraham nearly 2,000 years before Christ. Josephus says, he first taught the Egyptians astronomy and arithmetic. Joseph was there about 1706 years B.C. and the Exodus of the Israelites may have taken place 1491 B.C. Egypt was for a long time the capital of the civilized world, and men acquired a reputation by visiting it. It was considered the source of all art and science, and the best school for wisdom. The opinion in which the Egyptians themselves held knowledge is shown by their designation of a library, "the remedy for the diseases of the soul." Beautiful and true,—is it not? Lycurgus, when about to reform the laws, went to Egypt say

884 years B.C. Pythagoras (540 B.C. to 510), Solon (575 B.C.), Thales (born 639 B.C. B. 586), and a train of Grecian sages, left their own country to study the wisdom of the Egyptians.

It is a wondrous story, as saith Sir Thomas Browne:—"Time sadly overcometh all things, and is now dominant, and sitteth upon a sphinx, and looketh unto Memphis and old Thebes; while his sister, Oblivion, reclineth semi-somnolent on a pyramid, gloriously triumphing, making puzzles of Titian erections, and turning old glories into dreams. History sinketh beneath her cloud. The traveller, as he paces amazedly through those deserts, asketh of her who builded them, and she mumbleth something, but what it is he heareth not."

I shall not attempt to describe all the buildings which are still to be found there, but simply speak of some few of them with respect to the peculiarities of their architecture and the influence it had on that of other countries.

The most ancient structure remaining is the Great Pyramid,—one of those mighty works wherein, as Dénon says, men seem to have wished to measure themselves with nature. Quaint old Fuller says, the Pyramids are in their dotage, and have forgotten their makers' names. Moore, whom we have just now lost, calls the great one, in his exquisite prose poem, "The Epicurean," "The watch-tower of Time, from whose summit, when about to expire, he will take his last look." Herodotus, who visited Egypt about 450 years B.C. (some say 500), or more than 2,300 years ago, spoke even then with uncertainty of its date. It is, however, usually ascribed to Suphis (considered to be the Cheops of Herodotus), who reigned soon after Menes, and may be called 4,000 years old: Bunsen says 5,000!

The pyramid still seems strong enough to set Time at defiance for ages,—let us hope that man may not come in to the old destroyer's aid. According to Herodotus (Euterpel), 100,000 men were employed, who were relieved every three months, in hewing stones in the Arabian mountains, dragging them to the banks of the Nile, and transporting them to the required spot. Ten years were consumed in the labour of forming the road through which the stones were to be drawn. In the whole, according to Pliny, "300,000 men were employed twenty years together." It has been calculated that if it were required again to raise the stones from the quarries, and place them at their present height, the action of the steam-engines of England, which are managed at most by 36,000 men, would be sufficient to produce the same effect in eighteen hours. In this calculation it is supposed that the pyramid occupied 100,000 men twenty years.

The base of the Great Pyramid was 764 feet square (it is now 746 feet), and has always been called very nearly the size of the area known as Lincoln's inn-fields. In truth, however, this area, large as it looks, is not so large as that occupied by the pyramid. Mr. Scoles, the architect, measured the "Fields" one fine moonlight night, and found the dimensions between the houses 625 feet 6 inches from north to south, and 531 feet from east to west, giving an area of 12 acres, while the pyramid occupies 13½. The present height is 450 feet 9 inches; measured up the angle, it is 568 feet; it was formerly 611 feet on this line. The pyramid is constructed externally in steps, as you probably know, varying from 2 feet 2 inches in height to 4 feet 10 inches, up which those who desire to ascend are dragged by the native guides; originally these were cased to present a flat surface. The top is flat, about 32 feet square, and I once met an English lady who, with something like your own desire to see and do everything (that is proper), had danced in a quadrille upon it. The ascent is far from easy, and requires a steady head, as may be imagined, when we remember how much higher it is than St. Paul's. Even more so the descent. The stones employed in the construction vary from 5 feet in length to 30 feet, and from 3 feet to 4 feet in height.

I have drawn for you a small "section" of the Great Pyramid (fig. 7): a representation of it as it would appear if it were cut down the middle from the top to the bottom, and one half of it pushed away so as to show what the inside is made of. Doubtless you know what a section means (although many ladies do not); and I need not point out to you its derivation in *seco*, to cut; or remind you that the French call such a drawing a *coupe*.

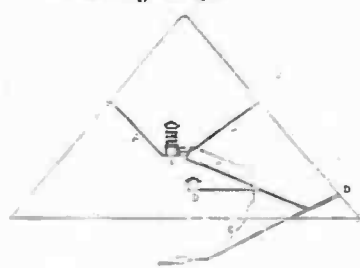


FIG. 7.

In the section drawn you will see what is called the King's Chamber (E), the Queen's Chamber (D), the Well (C), and the Entrance (B). F shows the main passage, and A A are channels for the admission or emission of air,—the device of some Memphian Reid to ventilate the Upper House. If we were to search far enough we might find, in what seemed to be simply the polychrome adornment of one side of a tomb, a touching record of his struggles with the architect, and the number of onions per week that he was allowed during his work!

The curious zig-zag passage (called the well) leads to an apartment in the base of the pyramid exactly under the central point—probably to contain the real kernel of this costly nut. There are strong evidences of design throughout the pyramids: one of the most striking is, that they all face due north. The entrance passage in the Great Pyramid forms an angle of 26° with the horizon; and learned astronomers have endeavoured to prove that it was so made to point to the pole-star. The angle in the other pyramids is not exactly the same. It is a more curious circumstance that the angle which the face forms with the horizon in twelve of the best preserved pyramids, varies only from 51° 10' to 52° 32'. The passages were narrow and confined, and there were various devices adopted to prevent the possibility of access. The sketch below (Fig. 8) will explain a curious arrangement of this sort in a pyramid at Dashoor. At one point, the narrow passageway was widened into a small apartment, and here a huge mass of granite was introduced, and was prevented by props or other means from closing the passage (a) until the whole was completed, and the interior of the pyramid appropriated. When this had been done the prop was removed (symbolized by the double line over the passage, in the section), and the mass of stone descended to the required position, and effectually cut off all communication.

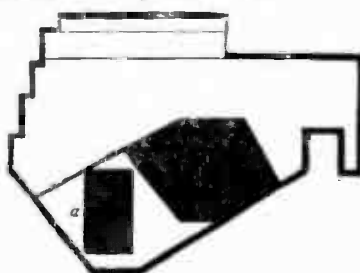


FIG. 8.

The solid contents of the Great Pyramid may be called 55,000,000 of cubic feet. The King's Chamber only forms 1/100 of the whole. So that leaving half of it solid for division walls, there might be 3,700 such chambers in this pyramid!

At a meeting of the Egyptian Society at Cairo on 25th of July, 1843, Dr. Lepsius expressed his opinion that all the pyramids were formed originally in steps or stories, like the